



Topic 10 AFIN8014FinTech and Innovation

Learning Objectives



1

Understand what is behavioral finance and its research focus



2

Discuss key behavioral finance biases and why it is hard for people to change



3

Explore whether FinTech innovations can improve financial behaviors



4

Discuss behavioral puzzles brought by FinTech Innovations

How People Make (Investment) Decisions?

The neo-classical approach

When individuals make decisions, their rationality is limited by the tractability of the decision problem, the cognitive limitations of their minds, and the time available to make the decision.

Herbert Simon, Nobel Prize Winner

The Prospect Theory

People systematically violate the predictions of expected utility theory and make decisions that are influenced by cognitive failures.

Kahneman and Tversk, Nobel Prize Winner

The Nudge Theory

Due to human beings' cognitive biases ,we can deliberately design how information/choices are presented to individuals, and hence influence their behavior.

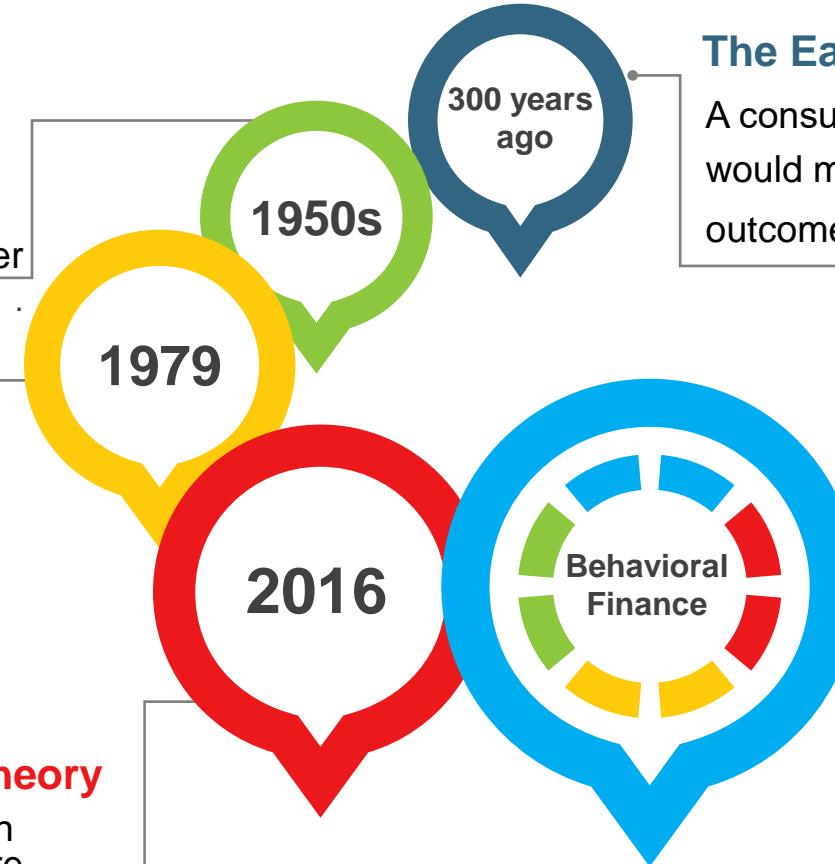
Richard Thaler, Nobel Prize Winner,

The Earliest Approach

A consumer is a 'rational economic man' who would make choices based on the expected outcomes of his/her decisions.

Finance Research with Root in Psychology

How psychology affects the investment decision making



The Core of Behavioral Finance



“People in standard finance are rational. People in behavioral finance are normal.”

— Meir Statman, 2014



We are not always
rational beings.



Our decisions are driven by a
range of subconscious factors
(desires, habits, social norms).

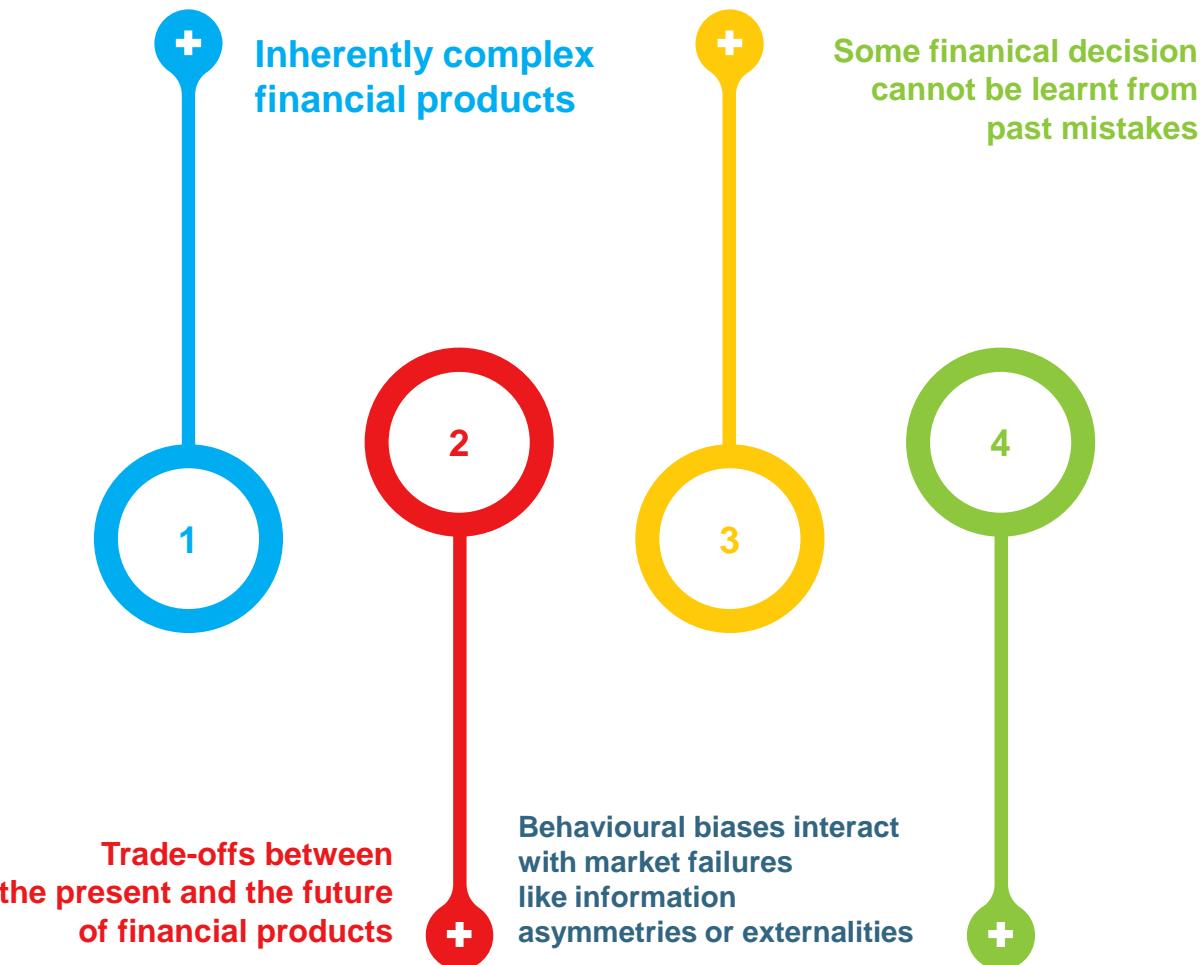


Subconscious factors are
consistent, predictable and
can be understood.

Behavioral Finance Biases

- Loss Aversion Bias
- Endowment Bias
- Affinity Bias
- Anchoring and Adjustment Bias
- Outcome Bias
- Mental Accounting Bias
- Self-Control Bias
- Confirmation Bias
- Hindsight Bias
- Representativeness Bias
- Overconfidence Bias
- Paradox of Choice
- Snake Bite Effect
- Illusion of Control
- Availability Bias
- Self-Attribution Bias
- Recency Bias
- Cognitive Dissonance Bias

Why Behavioral Problems in Financial Market?



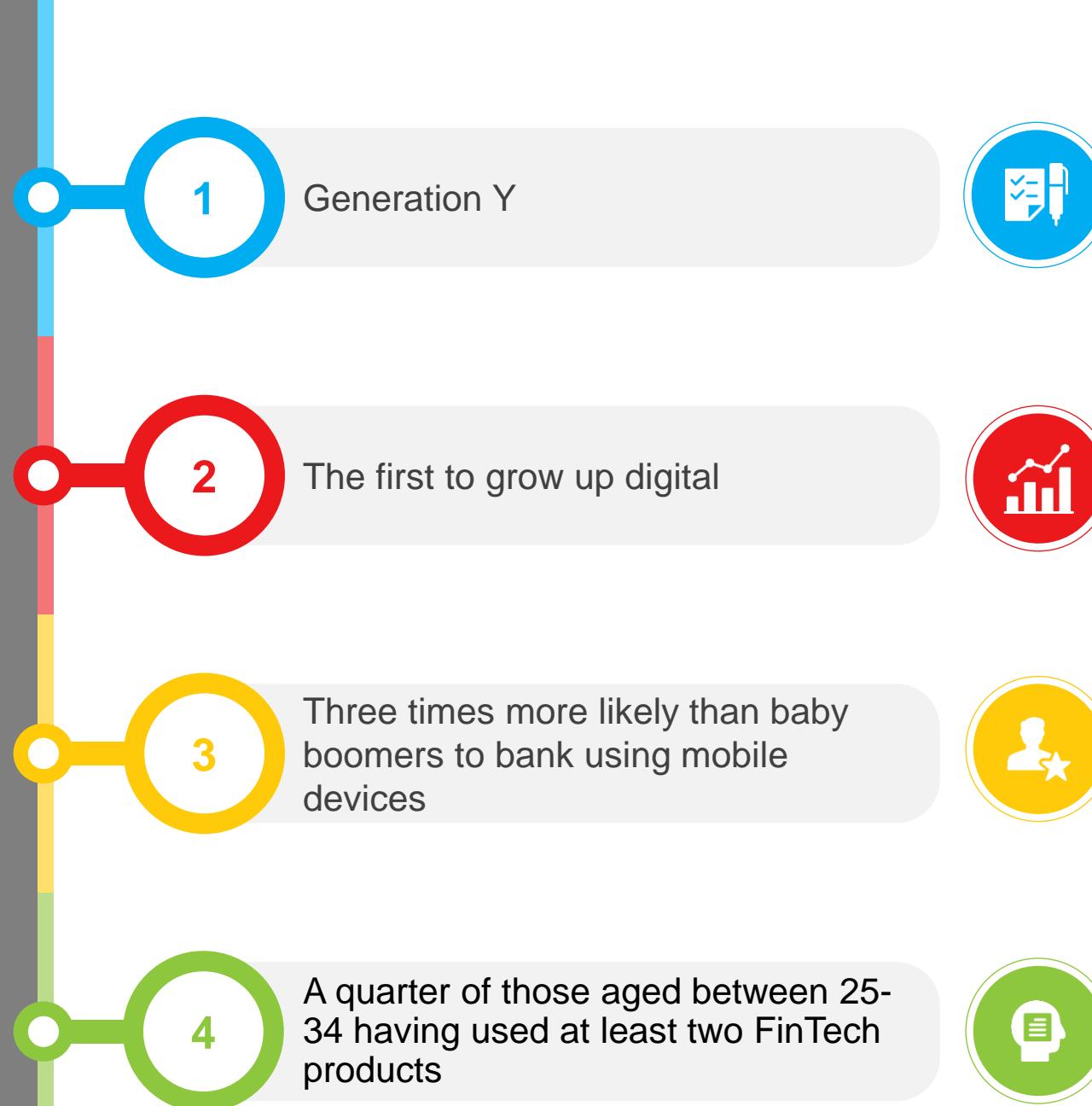


Can FinTech Innovations Improve Financial Behaviors?

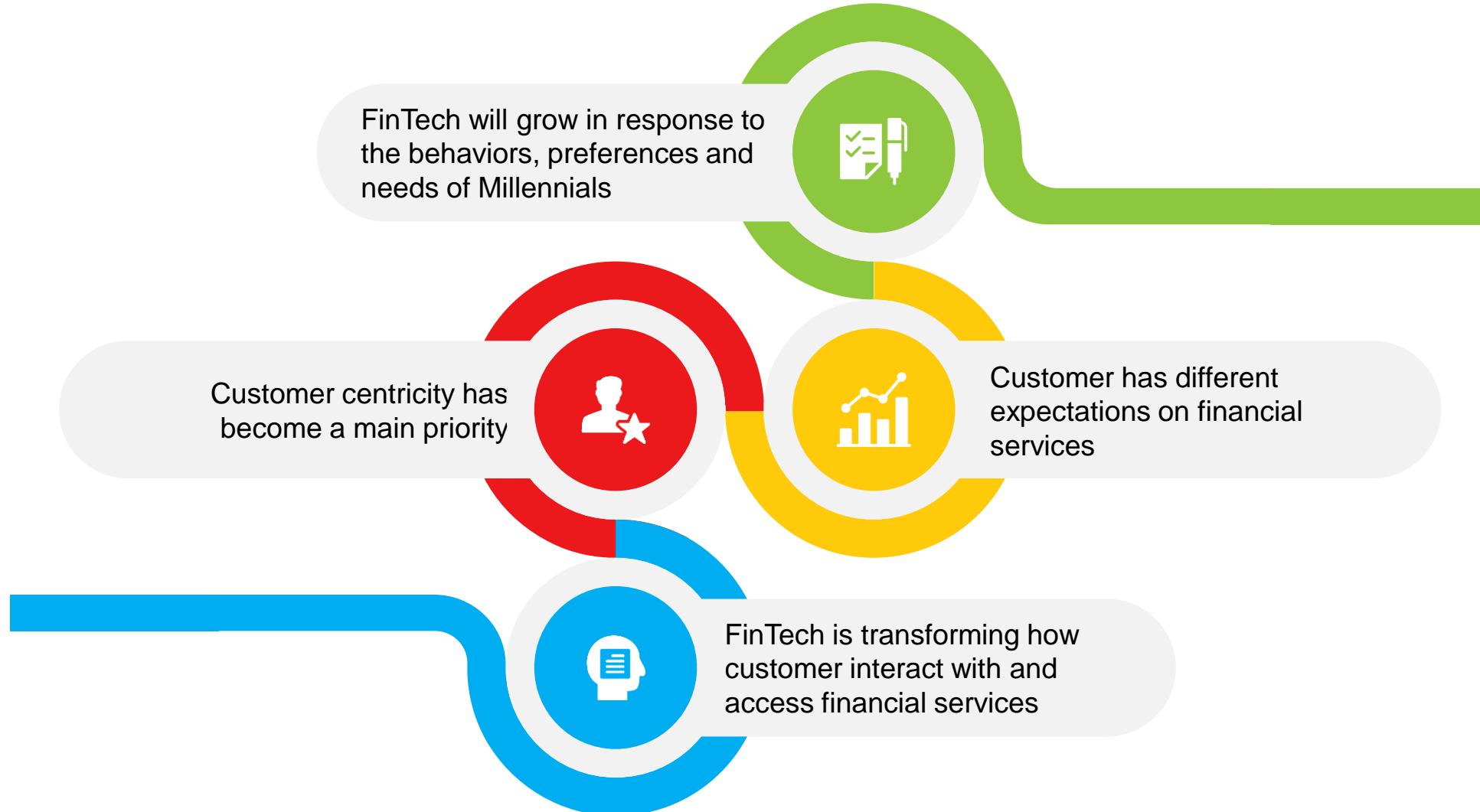
FinTech:Who are Main Users?

Millennials

People born between 1980 and 2000



FinTech: Changing Customer Expectation



Know Millennials: Key Considerations



Risk Aversion Increases After GFC

Social media 'influence'

Issues of overwhelming information

Issues of information asymmetry

Issues of trust

1

Issue of Trust

Trust in Financial Industry

Trust in Algorithm or Human Work

Key Consideration

2

Issue of Information

Information Asymmetry

Can Blockchain help with this issue?

Overwhelming information with too many choices

Can digital nudge help with this issue?



How Can FinTech Innovations Improve Financial Behaviors?

1

Choice Architecture

Adjust how investment choices are presented to investors

1. The default option in retirement savings.
2. Systematic Investment Plans (SIP)

ASIC, 2015: design consumer protection messages for hybrid securities

Provide information in a specific way

Information Presentation

2

Digital Nudging

1

Framing an Email

An email intervention on enrolment in a savings programme nearly doubles the programme enrolment.

2

Mental Accounting on Screens

A robo-saving apps directly and promptly encourage people to save more

3

Just-in-time Mobile Feedback

A personal capital mobile app helps people to decrease their monthly spending by 15.7 percent



Behavioural puzzles brought by FinTech



P2P Platforms: herding behavior of investors

Bitcoin: why the consensus in Bitcoin works well?